

**PHILIPS**

Lighting



## LumiStreet Pro gen2 Micro

**BGP391 LED30-4S/740 II DM32 CLO**

### Introduction

Increasing numbers of municipalities are having to upgrade large-scale conventional street lighting installations with energy efficient LED technology. But they are having to do this with smaller and smaller budgets. That's why the new generation of LumiStreet has been upgraded and designed to provide a solution to this challenge, it is the ideal solution for performing point-to-point replacement of conventional lighting. LumiStreet gen2 achieves this by offering high efficiency, low Total Cost of Ownership, and ease of installation and maintenance. The ease of installation and maintenance is enabled by the Philips Service tag. Moreover, the Philips SR (System Ready) socket makes it future-ready and you can pair this luminaire with lighting control and software applications such as Interact City.

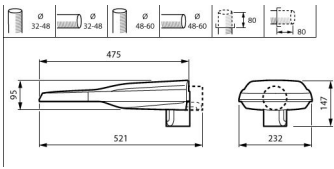
## Product Information

<b>Product Family Code</b>	BGP391
<b>Mechanical and Housing</b>	
<b>Housing Material</b>	Aluminum die cast
<b>Optic Material</b>	Polymethyl methacrylate
<b>Optical cover material</b>	Glass
<b>Fixation material</b>	Aluminum
<b>Ingress protection code</b>	-
<b>Mech. impact protection code</b>	-
<b>Corrosion resistance</b>	500 hours Salt Spray Test for standard version, 1.000 hours. Salt Spray Test optional Marine Salt Protection (MSP)
<b>Certification</b>	
<b>CE mark</b>	Yes
<b>ENEC mark</b>	ENEC plus mark
<b>RoHS mark</b>	Yes
<b>WEEE mark</b>	Yes
<b>Protection class IEC</b>	II
<b>Service</b>	
<b>Warranty period</b>	-
<b>Serviceability</b>	Class A, luminaire is equipped with serviceable parts (when applicable): LED board, driver, control units, surge protection device, optics, front cover and mechanical parts
<b>Light source replaceable</b>	Yes
<b>Operating ambient temperature range Tamb</b>	-
<b>Performance ambient temperature (Tq)</b>	25 °C
<b>Lumen maintenance</b>	1
<b>Lifetime</b>	100000 h
<b>Control gear failure rate at median useful life 100000h</b>	10%
<b>Surge protection</b>	6KV in Common or Differential mode as standard, 10KV with optional Surge Protector Device (SPD)

### IPEA - Energy classification

Road		Large area		Historical centers		Green areas		Cycle & pedestrian	
IPEA	Class	IPEA	Class	IPEA	Class	IPEA	Class	IPEA	Class
1.94	A8+	2.03	A9+	2.36	A12+	1.89	A7+	1.89	A7+

**Dimensional drawing(s) - mm**



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**Effective projected area**

**m<sup>2</sup>**

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# Light technical Report

## Drivers

<b>Description</b>	Xi SR 40W 0.2-1.0A SNEMP 230V C123 sXt
<b>12NC</b>	929002952506
<b>Number of driver(s)</b>	1
<b>Number of luminaire per MCB 16A</b>	30
<b>Inrush current</b>	24.6 A
<b>Inrush time</b>	159.5 $\mu$ s
<b>Input Voltage</b>	220V-240V
<b>Input Frequency</b>	50/60 Hz
<b>Start Current</b>	559 mA
<b>End Current</b>	577 mA
<b>System power (minimum)</b>	18.4 W
<b>System power (maximum)</b>	19 W
<b>System power (average)</b>	18.6 W
<b>Power consumption tolerance</b>	+/-10%
<b>Power Factor (100%)</b>	0.95
<b>Power Factor (50%)</b>	0.86
<b>Connectivity</b>	System Ready
<b>Dimming</b>	Dynadimmer DDF451

## Light engine

<b>Light source engine type</b>	LED
<b>Number of LED</b>	10
<b>Initial LED luminaire efficacy (source)</b>	158 lm/W
<b>Initial LED luminaire efficacy (system)</b>	142 lm/W
<b>Light source colour</b>	740 (Neutral White)
<b>Init. Colour Rendering Index</b>	70
<b>Init. CRI tolerance</b>	+/-2
<b>Init. Corr. Colour Temperature</b>	4000 K
<b>Initial tolerance</b>	+/- 180 K (5 SDCM)
<b>End of life tolerance</b>	+/- 255 K
<b>Initial luminous flux (source)</b>	2900 lm
<b>Luminous flux tolerance</b>	+/-7%
<b>Initial luminous flux (system)</b>	2610 lm
<b>Photobiological risk</b>	Risk group 0 (exempt) according to EN IEC 62471

## Optics

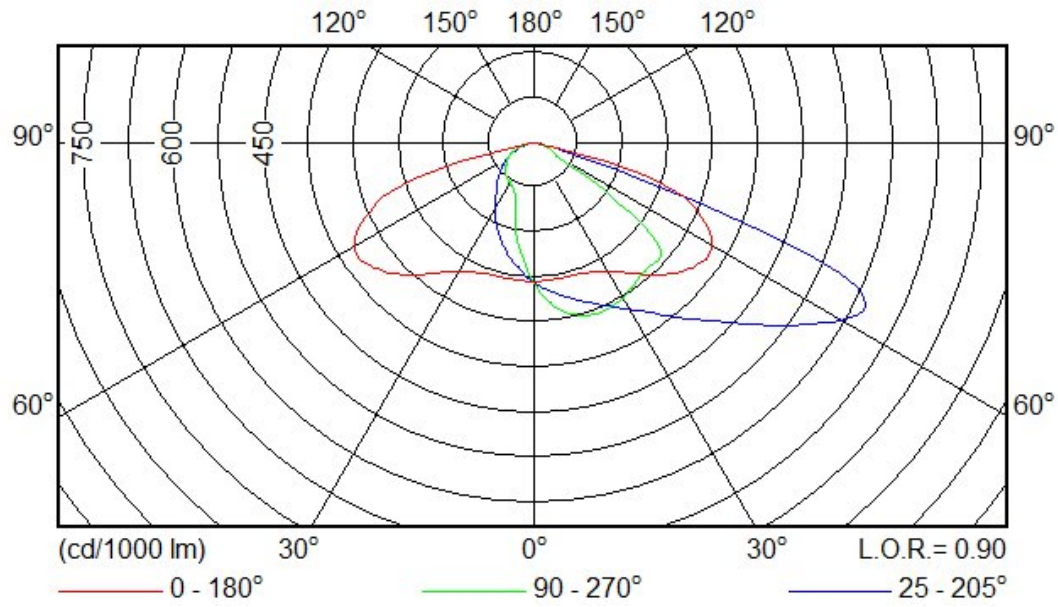
<b>Optical configuration</b>	DM32
<b>LOR</b>	0.90
<b>ULR at tilt=0°</b>	0.00%
<b>G* at tilt=0°</b>	G*3
<b>Imax (at 90° and above)</b>	0 cd/klm
<b>CIE code</b>	37 77 99 100 90

## Dimming range

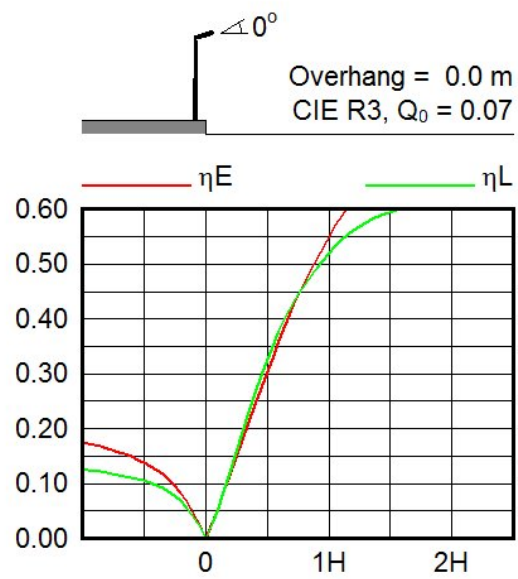
Current percentage	Current (mA)	System power (minimum) (W)	System power (maximum) (W)	System power (average) (W)	Source flux (lm)	System flux (lm)
100	559	18.4	19	18.6	2900	2610
95	532	17.4	18	17.8	2783	2505
90	504	16.6	17	16.8	2653	2388
85	476	15.8	16.2	16	2521	2269
80	448	15	15.2	15	2387	2148
75	420	14	14.4	14.2	2252	2049
70	392	13.2	13.4	13.4	2116	1926
65	364	12.4	12.6	12.4	1978	1800
60	336	11.4	11.6	11.6	1838	1673
55	308	10.8	10.8	10.8	1696	1543
50	280	9.9	10	10	1553	1413
45	252	9.1	9.2	9.1	1407	1280
40	224	8.2	8.3	8.2	1260	1147
35	196	7.3	7.4	7.3	1110	1010
30	168	6.2	6.3	6.3	958	872
25	140	5.2	5.2	5.2	805	733
20	112	4.1	4.1	4.1	648	590
15	84	3.1	3.1	3.1	490	446
10	56	2	2.1	2.1	329	299

# Photometric Graphs

## Polar intensity diagram



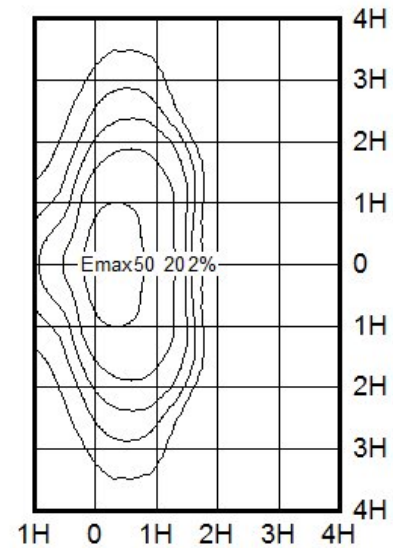
## Utilisation factor curve and luminance yield diagram    Relative isolux diagram



Horizontal Illuminance  $\triangle 0^\circ$

H (m)	$E_{max}$ (lux)
4.0	49
6.0	22
8.0	12

M.F. = 1.0



# Lab Information & Certification

## Lab Information

### Test standards

<b>EN 13032-4:2015</b>	Light and lighting. Measurement and presentation of photometric data of lamps and luminaires. Part 4: LED lamps, modules and luminaires
<b>EN 13032-1:2014</b>	Light and lighting. Measurement and presentation of photometric data of lamps and luminaires. Part 1: Measurement and file format
<b>IEC 62717:2014+AMD1:2015</b>	LED modules for general lighting - performance requirements
<b>IES LM-79-08</b>	IES Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products
<b>IEC / EN 62722-1:2014</b>	Luminaire performance - Part 1: General requirements
<b>IEC / EN 62722-2-1:2014</b>	Luminaire performance - Part 2-1: Particular requirements for LED luminaires

### Test equipment

LMT GO-DS 2000 Goniometer (C/G)	<input type="checkbox"/>
Yokogawa WT3000 power analyzer	<input type="checkbox"/>
Chroma 6415 programmable AC source	<input type="checkbox"/>
Agilent 6675A system DC power supply	<input type="checkbox"/>
Integrating sphere U-101-A	<input type="checkbox"/>
EM TEST NetWave3 AC/DC source	<input type="checkbox"/>
FLUKE Norma 4000 power analyzer	<input type="checkbox"/>
Sonopan L-100 luxmeter	<input type="checkbox"/>
Gigahertz X1-3 hazard lightmeter	<input type="checkbox"/>
Gigahertz XD-45-HB-4 Head	<input type="checkbox"/>
Gigahertz XD-45-HUV-4 head	<input type="checkbox"/>

### MEASUREMENT UNCERTAINTIES

Type of test	Uncertainties
Luminous flux	+/- 2.2 %
Power	+/- 0.5 %
Imax	+/- 2.2 %
Beam angle of Imax	+/- 0.1°
Ambient temperature 0-50°C	+/- 0.1°C

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Signed-off by  
Dariusz Pierzchanowski

**DISCLAIMER:** This photometry report is compiled based on real measurement done in Signify Laboratories during development and release of new products and calculation data pulled from PPS web-based tool and internal data. The values present in this report may differ from real values measured for specific product, but not more than +/-10 % on power and +/- 7% on lumen.



Łukasiewicz – IMiF Oddział PREDOM  
Centrum Badań i Certyfikacji  
02-255 Warszawa, ul. Krakowiaków 53



## CERTIFICATE OF ACCEPTANCE

### Customer's Testing Facility CTF-Stage 3 / E-CTF – Stage 3

Ref. No. 1/CTF/01/23

It is hereby confirmed that the  
Laboratory of Quality

**Signify Poland Sp. z o.o. O/Kętrzyn**  
**ul. Chrobrego 8, 11-400 Kętrzyn**  
**Poland**

is authorized by Łukasiewicz- IMiF PREDOM Division to perform testing  
for the certification body Łukasiewicz- IMiF PREDOM Division  
in the framework of  
ENEC, ENEC+, CCA agreements, IECEE CB Scheme and national certification  
for the products and standards as referred in the Appendix to this certificate and  
under conditions as mentioned in the Contract No. SMT/01/12 dated 10.10.2012  
This procedure is fully in accordance with the following operational documents

**IECEE OD-2048**  
**OD ECS 032**

The technical competence of the laboratory  
has been checked according to

**EN ISO/IEC 17025:2017**

*the proof has been given in the assessment carried out by Łukasiewicz- IMiF PREDOM Division  
This certificate is valid if the laboratory observes the requirements of the above mentioned standard and Operational Documents  
and under conditions of the Contract No. No. SMT/01/12 dated 10.10.2012*

This certificate is valid until: **2024-06-26**

Signed by /  
Podpisano przez:  
Paweł Andrzej  
Oziębło  
Date / Data:  
2023-06-26 09:34

Manager of Certification Office



Warsaw, 2023.06.26

**IECEE CTF Program**

This Certificate Of Acceptance confirms the participation of the above mentioned laboratory in the CTF program of IECEE and does not authorize the manufacturer to use any certification mark of Łukasiewicz-IMiF Oddział PREDOM or IECEE.



**Łukasiewicz – IMiF Oddział PREDOM**  
**Centrum Badań i Certyfikacji**  
 02-255 Warszawa, ul. Krakowiaków 53



## APPENDIX TO CERTIFICATE

Ref. No. 1/CTF/01/23

### Customer's Testing Facility CTF-Stage 3 / E-CTF – Stage 3

#### List of products and standards

For which the Laboratory of Quality Signify Poland Sp. z o.o. O/Kętrzyn is authorized to perform testing for the certification body Łukasiewicz – IMiF PREDOM Division in the framework of ENEC, ENEC+, CCA agreements, IECCEB Scheme and national certification

CATEGORY	PRODUCTS*)	STANDARDS**)		
		For ENEC and CCA	For IECCEB Scheme	For national certification
LITE	Fixed general purpose luminaires	EN 60598-1 EN 60598-2-1	IEC 60598-1 IEC 60598-2-1	EN 60598-1 EN 60598-2-1
LITE	Recessed luminaires	EN 60598-1 EN 60598-2-2	IEC 60598-1 IEC 60598-2-2	EN 60598-1 EN 60598-2-2
LITE	Luminaires for road and street lighting	EN 60598-1 EN 60598-2-3	IEC 60598-1 IEC 60598-2-3	EN 60598-1 EN 60598-2-3
LITE	Floodlights	EN 60598-1 EN 60598-2-5	IEC 60598-1 IEC 60598-2-5	EN 60598-1 EN 60598-2-5
LITE	Luminaires for emergency lighting	EN 60598-1 EN 60598-2-22	IEC 60598-1 IEC 60598-2-22	EN 60598-1 EN 60598-2-22
LITE	Luminaires with limited surface temperatures	EN 60598-1 EN 60598-2-24	IEC 60598-1 IEC 60598-2-24	EN 60598-1 EN 60598-2-24
LITE	LED modules for general lighting	EN 62031	IEC 62031	EN 62031
LITE (ENEC+)	LED modules for general lighting	EPRS 001 / IEC 62717	-	-
LITE (ENEC+)	Luminaires	EPRS 002 / IEC 62722-1	-	-
LITE (ENEC+)	LED Luminaires	EPRS 003 / IEC 62722-2-1	-	-
LITE	Lamp and luminaires	-	-	EN 13032-1
LITE	Lamp and luminaires	-	-	EN 13032-2
LITE	Lamp and luminaires	-	-	EN 13032-3
LITE	LED lamps, modules and luminaires	-	-	EN 13032-4
LITE	Solid-State Lighting Products	-	-	LM-79
HOR	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	IEC 62262	EN 62262

\*) – Name and address of manufacturing place of the products: Signify Poland Sp. z o.o. O/Kętrzyn ul. Chrobrego 8, 11-400 Kętrzyn., Poland  
 \*\*) – newest edition of the standards/documents

Signed by /  
 Podpisano przez:  
  
 Paweł Andrzej  
 Oziębło  
 Date / Data:  
 2023-06-26 09:34  
 Manager of Certification Office



**Warsaw, 2023.06.26**



## Testing Facilities CTF STAGE 3

E02/000009

AENOR recognizes that the testing facilities of the organization

**SIGNIFY B.V.**

registered office I.B.R.S./C.C.R.I. N° 10461  
5600 VB EINDHOVEN (The Netherlands)

have been accepted for the **Application of procedure CUSTOMER'S TESTING FACILITIES (CTF) - STAGE 3**

in conformity with international documents IECCE OD-2048 / ETICS OD-ECS 032

Name of testing facility Signify Manufacturing Spain  
Address of testing facility Crta. de las Arcas Reales, s/n  
47008 Valladolid - Spain

See annex for more information.

Certification scheme This recognition has been issued pursuant to international documents IECCE OD-2048 / ETICS OD-ECS 032 for performing the testing in accordance with standard(s) as detailed in annex.

This certificate is valid unless it is cancelled or withdrawn upon AENOR's written notification and for the particular conditions laid down in the agreement signed by both parties.

This certificate supersedes E02/000009, dated 2023-03-28

First issued on 2018-10-23  
Modified on 2023-05-19  
Validity 2024-10-23



Rafael GARCÍA MEIRO  
CEO

**AENOR INTERNACIONAL S.A.U.**  
Génova, 6. 28004 Madrid. España  
Tel. +34 91 432 60 00 - www.aenor.com



## Testing Facilities CTF STAGE 3

E02/000009

### Annex to Certificate

Name of testing facility Signify Manufacturing Spain  
 Address of testing facility Crta. de las Arcas Reales, s/n  
 47008 Valladolid - Spain

Category	Standards	Clauses
LITE	IEC 60598-1:2014 + AMD1:2017	All clauses
LITE	IEC 62471:2006, IEC TR 62778:2014	All clauses
LITE	EN 60598-1:2015 + A1:2018	All clauses
LITE	EN 60598-2-1:1989	All clauses
LITE	EN 60598-2-2:2012	All clauses
LITE	EN 60598-2-3:2003 + A1:2011	All clauses
LITE	EN 60598-2-5:2015	All clauses
LITE	EN 60598-2-24:2013	All clauses
LITE	EN 62031:2008 + A1:2013 + A2:2015	All clauses
LITE	EN 62471:2008	All clauses
LITE	IEC 60598-2-1:1979 + AMD1:1987	All clauses
LITE	IEC 62031:2018	All clauses
LITE	IEC 62717:2014 + AMD1:2015 + AMD2:2019	All clauses
LITE	IEC 60598-2-2:2011	All clauses
LITE	IEC 62722-2-1:2014	All clauses
LITE	PD EPRS 001:2014-12	All clauses
LITE	PD EPRS 003:2014-12	All clauses
LITE	PD EPRS 001:2018-05	All clauses
LITE	PD EPRS 003:2018-05	All clauses
-	EN 62262:2002 + A1:2021	All clauses
LITE	IEC 60598-1:2020	All clauses except 9.2.10 and 9.2.11
LITE	IEC 60598-2-1:2020	All clauses
LITE	EN IEC 60598-1:2021 + A11:2022	All clauses except 9.2.10 and 9.2.11
LITE	EN IEC 60598-2-1:2021	All clauses
LITE	IEC 60598-2-3:2002 + AMD1:2011	All clauses
LITE	EN IEC 62031:2020 + A11:2021	All clauses
LITE	IEC 60598-2-5:2015	All clauses
LITE	IEC 60598-2-24:2013	All clauses
-	IEC 62262:2002 + AMD1:2021	All clauses
LITE	IEC 60529:2013	All clauses
LITE	IEC 62031:2008 + AMD1:2012 + AMD2:2014	All clauses

First issued on 2018-10-23  
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 Validity 2024-10-23

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